## I. AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listings or versions thereof:

## **Listing of Claims:**

1. (Currently Amended) A method of inhibiting inflammation in a subject comprising administering to the subject a monoterpene composition that inhibits NF-κB, wherein the subject has an inflammatory disease further defined as rheumatoid arthritis or inflammatory bowel disease, and wherein said composition comprises a compound having a monoterpene moiety of the formula:

or an isomer thereof, wherein,

- a) R<sub>3</sub> is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, and a monoterpene group; and
- b) the formula further comprises R<sub>4</sub>, wherein R<sub>4</sub> is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group.
- 2. (Original) The method of claim 1, wherein said NF-κB is induced by TNF.
- 3. (Withdrawn) The method of claim 1, wherein said composition further comprises a carrier moiety.
- 4. (Withdrawn) The method of claim 3, wherein said carrier moiety comprises a lipid.
- 5. (Withdrawn) The method of claim 3, wherein said carrier moiety comprises a membrane permeable composition.

- 6. (Withdrawn) The method of claim 3, wherein said carrier moiety comprises a sugar.
- 7. (Withdrawn) The method of claim 3, wherein said carrier moiety comprises a triterpene moiety.
- 8. (Withdrawn) The method of claim 1, wherein the monoterpene composition further comprises a triterpene moiety.
- 9. (Original) The method of claim 1, wherein the monoterpene composition further comprises a sugar.
- 10. (Original) The method of claim 1, wherein the monoterpene composition further comprises a second monoterpene moiety.
- 11. (Withdrawn) The method of claim 8, wherein said triterpene moiety comprises the formula:

$$\begin{array}{c} R_{19} \\ R_{18} \\ R_{20} \\ R_{21} \\ R_{22} \\ R_{23} \\ R_{23} \\ R_{24} \\ R_{24} \\ R_{26} \\ R_{35} \\ R_{34} \\ R_{33} \\ R_{32} \\ R_{30} \\ R_{30$$

or an isomer thereof wherein,

- a) R<sub>1</sub> and R<sub>2</sub> are selected from the group consisting of hydrogen, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, an oligosaccharide;
- b) wherein R<sub>3</sub>-R<sub>36</sub> are each separately and independently selected from the group consisting of a point of unsaturation, hydrogen, hydroxyl, C1-C5 alkyl, C1-C5

- alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group; and
- c) at least one of  $R_3$ - $R_{36}$  is a monoterpene group.
- 12. (Withdrawn) The method of claim 11, wherein  $R_1$  and  $R_2$  each comprise an oligosaccharide.
- 13. (Withdrawn) The method of claim 12, wherein  $R_1$  and  $R_2$  each comprise a monosaccharide, a disaccharide, a trisaccharide or a tetrasaccharide.
- 14. (Withdrawn) The method of claim 13, wherein R<sub>1</sub> and R<sub>2</sub> each comprise an oligosaccharide comprising sugars which are separately and independently selected from the group consisting of glucose, fucose, rhamnose, arabinose, xylose, quinovose, maltose, glucuronic acid, ribose, N-acetyl glucosamine, and galactose.
- 15. (Withdrawn) The method of claim 14, wherein at least one sugar is methylated.
- 16. (Withdrawn) The method of claim 11, wherein R<sub>4</sub> is attached to the triterpene moiety through one of the methylene carbons attached to the triterpene moiety.
- 17. (Withdrawn) The method of claim 11, wherein said triterpene moiety further comprises at least one double bond.
- 18. (Withdrawn) The method of claim 11, wherein said isomer is a stereoisomer.
- 19. (Withdrawn) The method of claim 11, wherein said isomer is an optical isomer.
- 20. (Withdrawn) The method of claim 8, wherein said triterpene moiety is an acacic acid ester, a oleanolic acid ester, a betulinic acid ester, an ursolic acid ester, a quinovic acid ester, a pomolic acid ester, a rotundic acid ester, a rotungenic acid ester, a madasiatic acid ester, an asiatic acid ester, an euscaphic acid ester, a tormentic acid ester, madecassic acid ester, a lupeolic

acid ester, a cylicodiscic acid ester, a mollic acid ester, a jessic acid ester, an echinocystic acid ester, or an entagenic acid ester.

- 21. (Cancelled)
- 22. (Previously Presented) The method of claim 1, wherein said isomer is a cis isomer.
- 23. (Original) The method of claim 1, wherein said isomer is a trans isomer.
- 24. (Currently amended) The method of claim 1, wherein  $R_3$  is a sugar.
- 25. (Original) The method of claim 24, wherein the sugar is selected from the group consisting of glucose, fucose, rhamnose, arabinose, xylose, quinovose, maltose, glucuronic acid, ribose, Nacetyl glucosamine, and galactose.
- 26. (Original) The method of claim 24, further comprising a monoterpene moiety attached to the sugar.
- 27. (Previously Presented) The method of claim 1, wherein  $R_3$  has the following formula:

wherein R5 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group.

- 28. (Original) The method of claim 27, wherein R<sub>5</sub> is a hydrogen or a hydroxyl.
- 29. (Previously Presented) The method of claim 1, wherein said isomer is a stereoisomer.

30. (Previously Presented) The method of claim 1, wherein said isomer is an optical isomer.

31. (Previously Presented) The method of claim 1, wherein R<sub>3</sub> has the following formula:

32. (Previously Presented) The method of claim 1, wherein  $R_3$  has the following formula:

33. (Withdrawn) The method of claim 1, wherein said composition comprises the formula:

$$R_{10}$$

or an isomer thereof, wherein,

a) R<sub>1</sub> and R<sub>2</sub> are selected from the group consisting of hydrogen, C1-C5 alkyl, and an oligosaccharide;

- b) R<sub>3</sub> is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, and a monoterpene group; and
- c) the formula further comprises R<sub>4</sub>, wherein R<sub>4</sub> is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group, and wherein R<sub>4</sub> may be attached to the triterpene moiety or the monoterpene moiety.
- 34. (Withdrawn) The method of claim 33, wherein said isomer is a stereoisomer.
- 35. (Withdrawn) The method of claim 33, wherein said isomer is an optical isomer.
- 36. (Withdrawn) The method of claim 1, wherein said composition comprises the formula:

37. (Withdrawn) The method of claim 1, wherein said composition comprises the formula:

38. (Withdrawn) The method of claim 1, wherein said composition comprises the formula:

- 39. (Previously Presented) The method of claim 1, wherein the inflammation is inhibited when said composition is administered to the subject at a concentration of from about 0.5 to about  $2.0~\mu g/ml$ .
- 40. (Cancelled)
- 41. (Previously Presented) The method of claim 1, wherein said subject is a human or a mouse.
- 42-43. (Canceled)
- 44. (Original) The method of claim 1, wherein said composition inhibits COX-2.
- 45. (Original) The method of claim 1, wherein said composition inhibits iNOS.
- 46. (Original) The method of claim 1, wherein said administering is local.
- 47. (Original) The method of claim 46, wherein said administering is by injection.
- 48. (Original) The method of claim 46, wherein said administering is topical.
- 49. (Original) The method of claim 1, wherein said administering is systemic.
- 50. (Original) The method of claim 1, wherein said administering is oral.

- 51. (Original) The method of claim 1, wherein said composition is a pharmaceutical composition in a pharmacologically acceptable medium.
- 52. (Original) The method of claim 51, wherein said pharmacologically acceptable medium is a buffer, a solvent, a diluent, an inert carrier, an oil, a creme, or an edible material.
- 53. (Withdrawn) The method of claim 52, wherein said pharmaceutical composition further comprises a targeting agent.
- 54. (Withdrawn) The method of claim 53, wherein said targeting agent directs delivery of said pharmaceutical composition to an inflamed cell.
- 55. (Withdrawn) The method of claim 7, wherein said triterpene moiety is an acacic acid ester, a oleanolic acid ester, a betulinic acid ester, an ursolic acid ester, a quinovic acid ester, a pomolic acid ester, a rotundic acid ester, a rotungenic acid ester, a madasiatic acid ester, an asiatic acid ester, an euscaphic acid ester, a tormentic acid ester, madecassic acid ester, a lupeolic acid ester, a cylicodiscic acid ester, a mollic acid ester, a jessic acid ester, an echinocystic acid ester, or an entagenic acid ester.
- 56. (New) The method of claim 1, wherein the compound is Avicin D.